

WHAT IS CLAIMED IS:

1. A composite substrate in which an electrode and a dielectric layer are successively formed on an electrically insulating substrate,
5 said substrate having a coefficient of thermal expansion of 10 to 20 ppm/K.
2. The composite substrate of claim 1 wherein said
10 substrate is composed mainly of magnesia (MgO), steatite (MgO·SiO₂) or forsterite (2MgO·SiO₂).
3. The composite substrate of claim 1 or 2 wherein said dielectric layer is a sintered ceramic body composed mainly
15 of barium titanate (BaTiO₃).
4. The composite substrate of claim 3 wherein said dielectric layer contains one or more oxides selected from the group consisting of manganese oxide (MnO), magnesium
20 oxide (MgO), tungsten oxide (WO₃), calcium oxide (CaO), zirconium oxide (ZrO₂), niobium oxide (Nb₂O₅) and cobalt oxide (Co₂O₃).
5. The composite substrate of claim 3 wherein said
25 dielectric layer contains the oxides of one or more elements selected from the group consisting of rare earth elements Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu.
- 30 6. The composite substrate of claim 3 wherein said dielectric layer contains a vitreous component composed of silicon oxide (SiO₂).
7. An EL device comprising at least a light emitting
35 layer and a second electrode on the composite substrate of claim 1.

8. The EL device of claim 7 further comprising a second insulator layer between the light emitting layer and the second electrode.